

REMARKS

The Office Action dated November 28, 2007, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-21 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 22-24 have been added. No new matter has been added. Claims 1-24 are respectfully submitted for consideration.

Claims 1-9 were provisionally rejected under the doctrine of non-statutory obviousness-type double patenting over claims 1-9 of the co-pending application with U.S. Patent Application No. 10/347,383. The application No. 10/347,383 has been abandoned. Therefore, Applicants respectfully submit that the rejection under the doctrine of non-statutory obviousness-type double patenting over claims 1-9 is rendered moot.

Claims 1, 2, 7, 9-11, and 21 were rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Publication No. 2002/0006779 to Park et al. (Park). This rejection is respectfully traversed.

Independent claim 1, upon which claims 2-9 are dependent, recites a method that includes controlling a mobile communications network by a hierarchical radio network operations system with at least one radio network operations system on a subordinate level and a radio network operations system on a superior level. The controlling comprises initiating a controlling action on the part of the radio network operations

system on the superior level. The method also includes generating a call for data depending on the controlling action. The method additionally includes forwarding the call to at least one of the radio network operations systems on the subordinate level affected by the controlling action. The method further includes providing data on the part of the radio network operations system on the subordinate level affected by the controlling action in response to the call. The method also includes forwarding the data to the radio network operations system on the superior level.

Independent claim 10, upon which claims 11-21 are dependent, recites a system that includes at least one radio network operations system on a subordinate level. The system also includes a radio network operations system on a superior level, an initiator that is part of the radio network operations system on the superior level configured to initiate a controlling action. The system additionally includes a call generator configured to generate a call for data depending on the controlling action. The system further includes a first interface between said radio network operations system on the subordinate level and said radio network operations system on the superior level configured to forward the call to at least one of the radio network operations systems on the subordinate level affected by the controlling action and to forward data to the radio network operations system on the superior level. The system also includes a first provider that is part of the radio network operations system on the subordinate level configured to provide data in response to the call.

Independent claim 22 recites a means-plus-function variation of one of the above claims. Independent claim 23 is an apparatus claim that recites similar features of one of the above claims. Independent claim 24 is a method claim that recites similar features of one of the above claims.

As will be discussed below, Applicants respectfully submit that Park fails to disclose or suggest all of the elements of the present claims.

Certain embodiments of the present invention as claimed relates to a hierarchical radio network operation system that comprises at least one radio network operation system on a subordinate level and a radio network operation system on a superior level, wherein after a controlling action is initiated a demand for data depending on the controlling action is forwarded from the operation system on superior level to the operation system of subordinate level. In response to the demand or call, the operation system on the subordinate level provides data which is forwarded to the operation system on the superior level.

Park generally describes a method and apparatus for managing a mobile communication network, wherein a network management centre (100) manages a state information (which may be a configuration) of sub blocks installed within a base station manager (BSM 200), a plurality of control stations (300), and a plurality of base stations (400) by means of a TMN (telecommunication management network) method. See, paragraph [0027] of Park. The network management centre (100) transfers a common management information service element (CMISE) service execution instruction to the

BSM (200) in order to collect state information of the sub blocks within the BSM. See, paragraph [0010] of Park.

By referring to paragraph [0053] of Park, the Office Action asserted that the network management centre (100) would correspond to the claimed radio network operations system on the superior level, while the control station (300) would correspond to the radio network operation system on the subordinate level. Then, the CMISE service execution instruction would correspond to the claimed call for data depending on the controlling action, and the state information collection operation would correspond to the claimed forwarding of the data to the radio network operation system on the superior level.

However, this interpretation is not consistent, since the control station (300) cannot be interpreted as a radio network operation system on a subordinate level. According to paragraph [0004] of the U.S. publication document of the present application, configuration management actions have the objective to control and monitor the actual configuration on network elements and network resources. In contrast thereto, the control station (300) disclosed in Park merely seems to serve as information provider for generating state information about a configuration. See paragraph [0041] of Park

Thus, Applicants respectfully submit that Park fails to disclose or suggest, at least, “controlling a mobile communications network by a hierarchical radio network operations system with at least one radio network operations system on a subordinate

level and a radio network operations system on a superior level,” as recited in claims 1 and similarly recited in claim 10.

Moreover, from paragraph [0010] of Park it can be gathered that the control stations (300) are managed by the network management centre for managing the state information. There is no teaching or suggestion that indicates that the control stations (300) form a radio network operation system on a subordinate level. Park does not provide any incentive or motivation to replace the single level control of the network management centre (100) by a hierarchical level as claimed in the present application.

As such, Applicants respectfully submit that Park fails to disclose or suggest, in part, “generating a call for data depending on the controlling action, forwarding the call to at least one of the radio network operations systems on the subordinate level affected by the controlling action, and providing data on the part of the radio network operations system on the subordinate level affected by the controlling action in response to the call,” as recited in claim 1 and similarly recited in claim 10.

Therefore, the subject matter of independent claims 1 and 10 is neither anticipated nor suggested in Park. As such, it is respectfully requested that the rejection of claims 1 and 10 be withdrawn.

Claim 2, 7, 9, 11, and 21 are dependent upon claims 1 and 10. Accordingly, claims 2, 7, 9, 11, and 21 should be allowed for at least their dependence upon claims 1 and 10, and for the specific limitations recited therein.

Claims 3 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Concept and main requirements 3GPP TS 32.600 4.0.0 Release 4 (3GPP) and further in view of U.S. Patent Publication No. 2001/0037395 to Sabat Jr. et al. (Sabat). The Office Action asserted that Sabat, 3GPP, and Park describe all of the features of claims 3 and 12. This rejection is respectfully traversed.

Sabat generally describes an architecture for providing operations and maintenance functionality in an open access wireless signal distribution system. However, Sabat fails to remedy the deficiencies in Park and 3GPP. Therefore, Applicants respectfully submit that Sabat does not disclose or suggest all of the features of claims 1 and 10.

Claims 3 and 12 are dependent upon claims 1 and 10. Accordingly, claims 3 and 12 should be allowed for at least their dependence upon claims 1 and 10, and for the specific limitations recited therein.

For the reasons explained above, it is respectfully submitted that each of claims 1-24 recites subject matter that is neither disclosed nor suggested in the cited art. It is, therefore, respectfully requested that all of claims 1-24 be allowed, and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Additional Claim Fee Transmittal
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